ON THE COMPUTATION OF ATMOSPHERIC TURBIDITY AND WATER VAPOR FROM SOLAR RADIATION MEASUREMENTS—A CORRECTION TO PREVIOUS NOTE

In a paper in the REVIEW for November 1936, page 377, appears the following statement:

> I was greatly shocked when I discovered that the mean of values derived from $I_y - I_r$ and from $I_m - I_y$ had been employed in determining the values of β for dry air. I very much regret this error for which I assume full responsibility.

However, at a conference with my former associates at the Weather Bureau, it has now been made clear that the supposed erroneous method was correct. Therefore, no corrections are necessary to earlier computed values of β.

In computing values of β from $I_y - I_r$, I made use of a method that Hoelper has criticised on the ground that $I_y - I_r$ is too small a number to give accurate results. In this case, however, after November 15, $I_y - I_r$ had been measured by a very accurate instrument. It is, therefore, believed that the value derived from $I_y - I_r$ may be accepted as reasonably correct.

Beginning with January 1937, curves published by Hoelper in the *Deutschen Meteorologischen Jahrbuch* for 1933, and which Feussner recommends, will be employed in the United States in computing both β and w by the method now followed at European observatories, except that for the present, at least, we shall compute w from the difference between I_m (dry) and I_m (observed).—*H. H. Kimball.*

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[RICHMOND T. ZOCH, *in Charge of Library*]

By AMY D. PUTNAM

RECENT ADDITIONS

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SOLAR OBSERVATIONS

SOLAR RADIATION MEASUREMENTS DURING DECEMBER 1936

By IRVING F. HAND, Assistant in Solar Radiation Investigations

For a description of instruments employed and their exposures, the reader is referred to the January 1935 REVIEW, page 24.

Table 1 shows that solar radiation intensities averaged below normal at Washington and Madison, and slightly above normal at Lincoln.

Table 2 shows a deficiency in the amount of total solar and sky radiation received on a horizontal surface at all stations with the exception of Madison, Fresno, New York, and Twin Falls. The percentage departures for the year show that all stations had an excess with the exception of Twin Falls, Miami, Riverside, and Blue Hill.

Beginning with this issue table 3 appears in a slightly different form containing two new columns, thus enabling the reader to better follow the method of computation. On the computation of β and w, see the November REVIEW, p. 377, and this REVIEW, p. 430.

Polarization observations obtained at Washington on 6 days give a mean of 55 percent with a maximum of 60 percent on the 5th. At Madison observations were obtained on 2 days only, the 4th and 31st, with values of 54 and 64 percent, respectively. All of these values are slightly below the corresponding normals for December.